

THE IMPERATIVE OF STATE DROUGHT CONTINGENCY PLANS: THE FATE OF THE COLORADO RIVER

The future of over forty million people across seven states is inextricably linked to the fate of the Colorado River, which is facing an imminent threat to its sustainability.¹ The Colorado River is the lifeline to most of the southwestern United States and northwestern Mexico, not only providing drinking water to major metropolitan cities, rural communities, and twenty-two Native American tribes but also nourishes 5.5 million acres of farmland, generates hydro-electricity, supports tourism revenue derived from National Parks, and provides habitats for a plethora of species, including many threatened and endangered species.² The Colorado River basin has been experiencing a severe drought brought on by climate change since 2000, which is exacerbating the issue of ever-increasing overuse of its precious resource.³ Currently, the two main reservoirs of the Colorado River are at historic low levels with Lake Powell in Utah at forty-three percent capacity and Lake Mead in Nevada at an even more critical thirty-eight percent capacity.⁴ Thus, it is of paramount importance that the applicable states each approve their own Drought Contingency Plans (DCP) in order to bolster the levels of the reservoirs and prevent desolation of the reservoirs and the complete inhabitability and economic impracticability of the region.

The U.S. Constitution permits states to enter into interstate compacts allowing the Colorado basin states to create DCPs, but the plans must be approved by Congress for them to be legally binding.⁵ The upper basin states, which include Colorado, Wyoming, Utah, and New Mexico, must work to protect the water levels of Lake Powell while the lower basin states, which are California, Arizona, and Nevada, need to protect Lake Mead.⁶ Upper basin plans “boost[] snowpack with weather modification, better manag[e] existing reservoirs, and creat[e] a water bank in

1. See Eric Holthaus, *The Water War that Will Decide the Fate of 1 in 8 Americans*, GRIST (May 2, 2018), <https://grist.org/article/the-water-war-that-will-decide-the-fate-of-1-in-8-americans/>.

2. U.S. DEPARTMENT OF THE INTERIOR, <https://www.doi.gov/water/owdi.cr.drought/en/> (last visited on Dec. 22, 2018).

3. *Id.*

4. Associated Press, *Lakes Mead and Powell at about 40 Percent Capacity; Deadline Approaching for Colorado River Drought Plan*, ST. GEORGE NEWS (Dec. 9, 2018), <https://www.stgeorgeutah.com/news/archive/2018/12/09/apc-with-lakes-mead-and-powell-at-around-40-percent-capacity-deadline-approaches-for-colorado-river-drought-plan/#.XB6a9VxKhPY>.

5. U.S. CONST. art. I, § 10, cl. 3 (Once Congress approves the Drought Contingency Plans they become federal law).

6. *Colorado River Basin Drought Contingency Plans*, FEDERAL BUREAU OF RECLAMATION (last updated Oct. 10, 2018), <https://www.usbr.gov/dcp/>.

Lake Powell.”⁷ Lower basin plans entail “creat[ing] new incentives for water users like farmers and cities to conserve water in Lake Mead and to agree to earlier, deeper cuts to water use so the reservoir can avoid dropping to dead pool levels.”⁸ The DCPs would mainly involve the states conserving water in order to “store defined volumes of water” in the reservoirs by making their own internal plans that are a part of the larger agreements with the other upper or lower basin states.⁹

The state DCPs are the collaboration needed to help the people and animals living in the area as well as the revenue gained from the Colorado River. Minute 323, an international agreement between Mexico and the United States, includes “the Binational Water Scarcity Contingency Plan in which Mexico agrees to join the U.S. states in temporarily taking less water from Lake Mead in order to avoid future shortages.”¹⁰ The implementation of the Binational Water Scarcity Contingency Plan “is contingent on completion of the [DCPs] being developed by the lower basin states.”¹¹ Arizona and California, the holdout states, must approve their DCPs before the federal deadline in order to prevent federal intervention, which could involve even further intruding on property rights along with other negative implications.

THE IMPLICATIONS OF FEDERAL INTERVENTION

Last year, the Commissioner of the Federal Bureau of Reclamation, Brenda Burman, instructed the seven states that rely on the Colorado River to create DCPs by the end of 2018.¹² Burman has now set a strict deadline of January 31, 2019 for the two remaining states, Arizona and California, to agree on their respective DCPs or else the federal government will intervene.¹³ Although Burman did not provide details on a federal plan, it could mean that the water allocation would be even further reduced than if the states’ DCPs were implemented, possibly leading to increased conflict and litigation.¹⁴ Federal officials in Washington do not live in the region, so they lack the full understanding of the “economic

7. *When in Drought: States Take on Urgent Negotiations to Avoid Colorado River Crisis*, NPR (Oct. 14, 2018 8:00 AM), <https://www.npr.org/2018/10/14/656343127/when-in-drought-states-take-on-urgent-negotiations-to-avoid-colorado-river-crisis>.

8. *Id.*

9. *Metropolitan Board Approves Drought Contingency Plan to Keep Colorado River Supplies Flowing to Southern California*, ASSOCIATED PRESS (Dec. 11, 2018), <https://www.apnews.com/81789519f4684d3c8553540f564e5d79>; see Ian James, ‘Running Out of Time’: Federal Water Official Sets Deadline for Colorado River Deal, AZ CENTRAL (Dec. 13, 2018, 6:25 PM), <https://www.azcentral.com/story/news/local/arizona-environment/2018/12/13/federal-water-official-sets-deadline-colorado-river-drought-deal/2301898002/>.

10. Regina M. Buono & Jill Baggerman, *Mexico-U.S. Cooperation on the Colorado: Prioritizing Sustainability Under Minute 323*, INT’L WATER LAW PROJECT BLOG (Jan. 15, 2018, 3:00 AM), <https://www.internationalwaterlaw.org/blog/2018/01/15/mexico-us-continued-cooperation-on-the-colorado-river-under-minute-323/>.

11. *Id.*

12. FEDERAL BUREAU OF RECLAMATION, *supra* note 6.

13. James, *supra* note 9.

14. *See id.*

needs” of the locals and may be mainly focused on prioritizing national interests.¹⁵ Moreover, the federal decision-making process is “fragmented,” meaning decisions are made based on political influence rather than priority management.¹⁶ “Political discretion dictates that ‘locals’ should deal with the issue of water management.”¹⁷

Additionally, a federal plan may not ensure full cooperation among all parties because they are not terms that the states agreed upon and will be more likely to be in noncompliance and result in a “tragedy of the commons.”¹⁸ Access to water “can be difficult and costly to control” making it easy to exploit, so complete collaboration is imperative.¹⁹ On the other hand, the federal government may not do enough to ensure conservation given that the current presidential administration believes that climate change is not a pressing concern, evidenced by the ongoing environmental rollbacks, which includes the involvement of the Department of the Interior, the department that oversees the Bureau of Reclamation.²⁰

Lastly, the DCPs also require funding, and federal involvement creates uncertainty over adequate funding and allocation of funds with the recent partial government shutdown as a prime example with the Bureau of Reclamation affected.²¹ State officials can be held more easily accountable for their actions come election time, so there is more certainty with regards to funds if the states are in control. However, even if the states create the DCPs, partial federal funding will still be needed.²²

15. Robin Kundis Craig, *Adapting Water Federalism to Climate Change Impacts: Energy Policy, Food Security, and the Allocation of Water Resources*, 5 ENVTL. & ENERGY L. & POL’Y J. 183, 234 (2010).

16. Roy R. Carriker & L. Tim Wallace, *Government Involvement in Water Use and Development: More or Less, and at What Level?*, 58, <https://ageconsearch.umn.edu/bitstream/17508/1/ar820056.pdf>.

17. David Ganje, *One State’s Water Is Another State’s Gold*, CAPITAL JOURNAL (Dec. 23, 2018), https://www.capjournal.com/opinions/columnist/one-state-s-water-is-another-state-s-gold/article_22fe8a2c-0736-11e9-912a-6fa0d0c29be2.html.

18. See James L. Huffman, *The Federal Role in Water Resource Management*, 17 N.Y.U. ENVTL. L.J. 669, 698 (2008).

19. *Id.*

20. See Josh Dawsey, Philip Rucker, Brady Dennis, & Chris Mooney, *Trump on Climate Change: ‘People Like Myself, We Have Very High Levels of Intelligence but We’re Not Necessarily Such Believers.’*, WASH. POST (Nov. 27, 2018), https://www.washingtonpost.com/politics/trump-on-climate-change-people-like-myself-we-have-very-high-levels-of-intelligence-but-were-not-necessarily-such-believers/2018/11/27/722f0184-f27e-11e8-acea-b85fd44449f5_story.html?noredirect=on&utm_term=.2c1eb4e5eb19 (discussing President Trump’s disbelief of climate change as a major problem after reading government analysis that reported climate change is a major problem); *Trump’s Environmental Rollback Rolls On*, BBC (Dec. 6, 2018), <https://www.bbc.com/news/world-us-canada-46471447>.

21. Kate Davidson & Andrew Duehren, *What Is and Isn’t Affected by the Partial Government Shutdown*, WALL ST. J. (Jan. 1, 2019), <https://www.wsj.com/articles/what-is-and-isnt-affected-by-the-partial-government-shutdown-11546344002>.

22. Brandon Loomis, *American Rivers Puts Lower Colorado River Atop Its Annual List of Troubled Waters*, AZ CENTRAL (May 23, 2018, 2:39 PM), <https://www.azcentral.com/story/news/local/arizona-water/2017/04/11/lower-colorado-river-lake-mead-americas-most-endangered-rivers/100302402/>.

THE SITUATION IN ARIZONA

Although there has been significant progress in adopting an internal plan in Arizona, there remains important details to be discussed by the representatives of the state's interested parties, including funding of groundwater drilling for farmers in Pinal County.²³ Also, Arizona is the only state that requires legislative approval, which convenes on January 14th.²⁴ This is cutting close to the federal deadline and has the potential to lead to "unintended consequences" because the legislators will be rushed to find solutions to complex problems.²⁵ Also, stakeholders' attempts at further negotiations during the legislative session could threaten the state's ability to meet the deadline, and if the legislators agree to one stakeholder's adjustments then others will want the same.²⁶

Because Arizona has junior priority water rights, the state will have to forgo the most water out of the lower basin states.²⁷ This may not seem fair, but Arizona agreed to these junior rights in order to build the Central Arizona Project, a major canal that delivers Colorado River water to cities such as Phoenix and Tucson.²⁸ Even though each state has a determined cap on the amount of water they can withdraw and store, California and Nevada have each generously agreed to allow Arizona to use 50,000 acre-feet of their respective storage allowances.²⁹

THE SITUATION IN CALIFORNIA

As California works towards finishing their internal DCP, a powerful farmer, Mike Abatti, attempted to prevent his irrigation district from signing onto the plan in order to protect his water rights.³⁰ Abatti is one of the most influential farmers in the Imperial Valley where the agriculture industry is worth an estimated \$4.5 billion.³¹ The Imperial Valley Irrigation District (IID) holds in trust over twenty percent of the Colora-

23. Tony Davis, *Federal Official Threatens Takeover of Key Colorado River Decisions from States*, TUCSON (Dec. 13, 2018), https://tucson.com/news/local/federal-official-threatens-takeover-of-key-colorado-river-decisions-from/article_643e0c7f-bdac-5acf-8c33-14bfc8bee576.html.

24. James, *supra* note 9.

25. Bret Jasper, *With Deadline Looming, Can Arizona Legislature Agree to Complex Drought Plan?*, ARIZONA PBS (Jan. 2, 2019), <https://cronkitenews.azpbs.org/2019/01/02/arizona-legislature-drought-water-plan/>.

26. *Id.*

27. Joanna Allhands, *The Plan to Save Lake Mead (for Now) Is Finally Public. Here's What's in It*, AZ CENTRAL (Oct. 13, 2018 6:00 AM), <https://www.azcentral.com/story/opinion/oped/joannaallhands/2018/10/13/lower-basin-drought-contingency-plan-arizona/1593476002/>.

28. *Id.*

29. *Id.*

30. Janet Wilson, *Imperial Valley Judge Rules Against Farmers, Warns Fight over Water Rights Could End Up in U.S. Supreme Court*, THE DESERT SUN (Nov. 28, 2018, 6:02 PM), <https://www.desertsun.com/story/news/2018/11/28/imperial-valley-water-fight-could-end-up-high-court/2144647002/>.

31. Sammy Roth, *In the California Desert, a Farm Baron Is Building a Water and Energy Empire*, THE DESERT SUN (Aug. 15, 2018 5:06 PM), <https://www.desertsun.com/in-depth/tech/science/energy/2018/08/01/california-desert-farm-baron-builds-water-and-energy-empire/636894002/#coloradoriver>.

do River water used in the US, the largest single share.³² Abatti was denied his motion for an injunction against IID by California Superior Court Judge L. Brooks Anderholt who is a friend of Abatti and had previously ruled in his favor in a case against IID in 2013 regarding water rights.³³ Judge Anderholt warned that a continuing legal battle could attract the attention of Congress to create federal legislation, or the case could land in the U.S. Supreme Court.³⁴

Although there is no telling whether Abatti will appeal the decision, if he does then the appeal could prolong the process of creating a DCP in California, and the federal government will inevitably intervene. Therefore, the continuance of this legal dispute could not only affect the property rights of Abatti and other farmers within the Imperial Valley but ripple across state lines and even international borders. Moreover, there is the possibility that other farmers or water rights holders will pursue litigation in order to protect their senior water rights and impede on completion of the plan.³⁵

CONSEQUENCES OF THE DROUGHT CONTINGENCY PLANS

Although the DCPs are essential, the negative implications of them, whether created by the states or the federal government, can be widespread. The conservation of water may hinder economic growth in the area by not allowing any further allocation of water rights and limit development by current right holders. The Imperial Valley farmers along with other farmers in the Colorado River basin provide a significant amount of produce to the rest of the United States as well as Canada.³⁶ Thus, the cost of produce, the amount of produce, or both may drastically change as this drought persists, which would negatively impact the domestic economy and national exports. If this situation does not happen, it is because the DCPs in Arizona and California will fund groundwater well operations allowing farmers to tap into another depleting water source.³⁷ Therefore, the DCPs are not the final solution to this water issue.

Notwithstanding these consequences, if there is no cooperative plan to conserve water or if the upper basin states do not comply with the DCPs, then the water level in Lake Powell will be too low for water to flow downstream into Lake Mead, resulting in those states violating the

32. *Id.*

33. Wilson, *supra* note 30.

34. *Id.*

35. Richard Montenegro Brown, *Farmers Threaten Legal Action over DCP*, IMPERIAL VALLEY PRESS (Nov. 16, 2018), https://www.ivpressonline.com/news/local/farmers-threaten-legal-action-over-dcp/article_fb371154-e94d-11e8-9c8a-6ba92e6f3c62.html.

36. See Roth, *supra* note 31.

37. See James, *supra* note 9.

1922 Colorado River Compact.³⁸ This compact is an “apportionment scheme” that divvies up the Colorado River water between the upper and lower basins and each state within the basins.³⁹ This situation will not only result in absolute chaos in the lower basin states but may cause “a decades-long legal battle among government agencies throughout the basin.”⁴⁰ Also, if the Colorado River reservoirs fall too low, then there will be minimal or no power generation by the hydro-electric dams, leaving millions without electricity.⁴¹

CONCLUSION

To help ensure the sustainability of this most essential resource that touches on every aspect of life in the Southwest, everyone must commit to collaboration by putting the public interest in front of individual interests. There must be a balance between historic water rights and conservation where all states share the burden of the shortage so that we can continue to enjoy the Colorado River and the lifeblood it provides. It is in all affected parties’ self-interest not to impede the states from creating their DCPs before the federal deadline because federal intervention will most likely mean even more drastic measures, further reducing the amount of water allocated. Federal intervention could also invite more conflict over water rights and litigation as the federal government most likely will not prioritize local interests.⁴²

However, conservation of surface water will most likely entail tapping into groundwater in states such as Arizona and California, which is not sustainable and not a long-term solution. There needs to be a change in how we use water in cities systemically, a creation and utilization of technology and methods to more efficiently irrigate crops, and a switch to less water-intensive crops due to the fact that agriculture consumes the majority of available water.⁴³ In the worst-case scenario, the overconcentrated agricultural economy in the region may need to shift to more sustainable areas of the country to significantly decrease the stress put on the Colorado River. Although the state DCPs will not solve the water issues in the region, they are a step in the right direction.

38. See Luke Runyon & Bret Jaspers, *Three Things to Know About Colorado River Plans in the Works*, KUNC (Oct. 30, 2018), <https://www.kunc.org/post/three-things-know-about-colorado-river-plans-works#stream/0>.

39. Jason A. Robinson & Douglas S. Kenney, *Equity and the Colorado River Compact*, 42 ENVTL. L. 1157, 1164 (2012).

40. Runyon, *supra* note 38.

41. *See id.*

42. *See* James, *supra* note 9.

43. Heather Cooley et. al., *Water Risk Hotspots for Agriculture: The Case of the Southwest United States*, PACIFIC INSTITUTE (Sept. 22, 2016), <https://pacinst.org/publication/water-risk-hotspots-agriculture-case-southwest-united-states/>; Agriculture, COLORADO RIVER WATER USERS ASS’N, <https://www.crwua.org/colorado-river/uses/agriculture>.

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